## Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

- 1 (Original). An immunizing composition, comprising an immunizing effective amount of an antigenic product which induces an immune response against the  $\beta$ -secretase cleavage site of amyloid precursor protein (A  $\beta$ PP) and a pharmaceutically acceptable carrier, diluent, excipient, adjuvant, or auxiliary agent.
- 2 (Original). The immunizing composition of claim 1, wherein said antigenic product comprises a dendritic polymer, built on a core molecule, which is at least difunctional so as to provide branching, and containing up to 16 terminal functional groups to which an antigenic peptide, that comprises an A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP, is joined by covalent bonds.
- 3 (Original). The immunizing composition of claim 2, wherein said dendritic polymer contains eight terminal functional groups to which an antigenic peptide is joined.
- 4 (Original). The immunizing composition of claim 2, wherein said A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises residues 1 to 8 of SEQ ID NO:1.

- 5 (Original). The immunizing composition of claim 2, wherein said A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises SEQ ID NO:5.
- 6 (Original). The immunizing composition of claim 2, wherein said antigenic peptide comprises two overlapping A $\beta$ PP epitopes of said  $\beta$ -secretase cleavage site of A $\beta$ PP.
- 7 (Original). The immunizing composition of claim 6, wherein said two overlapping A $\beta$ PP epitopes are identical.
- 8 (Original). The immunizing composition of claim 2, wherein said core molecule is lysine.
- 9 (Original). The immunizing composition of claim 2, further comprising a molecule having adjuvant properties joined to said dendritic polymer.
- 10 (Original). The immunizing composition of claim 2, wherein said antigenic product is encapsulated in a liposome.
- 11 (Original). The immunizing composition of claim 1, wherein said antigenic product comprises a viral display vehicle displaying on its surface an A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP.
- 12 (Original). The immunizing composition of claim
  11, wherein said viral display vehicle is a filamentous
  bacteriophage.

13 Original). The immunizing composition of claim 11, wherein said A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises residues 1 to 8 of SEQ ID NO:1.

14 (Original). The immunizing composition of claim 11, wherein said A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises SEQ ID NO:5.

immune response against the  $\beta\text{--secretase}$  cleavage site of A $\beta\text{PP}$  comprising administering the immunizing composition of claim 1 to a human subject in need thereof to induce an immune response against the  $\beta\text{--secretase}$  cleavage site of A $\beta\text{PP}$  and block  $\beta\text{--secretase}$  cleavage of A $\beta\text{PP}$ , thereby inhibiting the formation of amyloid  $\beta$ .

16-22 (Cancelled).

23 (New). An immunizing composition, comprising an immunizing effective amount of an antigenic product which induces an immune response against the  $\beta$ -secretase cleavage site of amyloid precursor protein (A $\beta$ PP) and a pharmaceutically acceptable carrier, diluent, excipient, adjuvant, or auxiliary agent, said antigenic product comprising at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP, wherein said at least one A $\beta$ PP epitope

comprises the sequence of SEQ ID NO:5 and/or residues 1 to 8 of SEQ ID NO:1.

- 24 (New). The immunizing composition of claim 23, wherein said antigenic product comprises a dendritic polymer, built on a core molecule, which is at least difunctional so as to provide branching, and containing up to 16 terminal functional groups to which an antigenic peptide, that comprises said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP, is joined by covalent bonds.
- 25 (New). The immunizing composition of claim 24, wherein said dendritic polymer contains eight terminal functional groups to which an antigenic peptide is joined.
- 26 (New). The immunizing composition of claim 24, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises residues 1 to 8 of SEQ ID NO:1.
- 27 (New). The immunizing composition of claim 24, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP consists of residues 1 to 8 of SEQ ID NO:1.
- 28 (New). The immunizing composition of claim 24, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises SEQ ID NO:5.

- 29 (New). The immunizing composition of claim 24, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP consists of SEQ ID NO:5.
- 30 (New). The immunizing composition of claim 24, wherein said antigenic peptide comprises two overlapping A $\beta$ PP epitopes of said  $\beta$ -secretase cleavage site of A $\beta$ PP.
- 31 (New). The immunizing composition of claim 30, wherein said two overlapping A $\beta$ PP epitopes are identical.
- 32 (New). The immunizing composition of claim 24, wherein said core molecule is lysine.
- 33 (New). The immunizing composition of claim 24, further comprising a molecule having adjuvant properties joined to said dendritic polymer.
- 34 (New). The immunizing composition of claim 24, wherein said antigenic product is encapsulated in a liposome.
- 35 (New). The immunizing composition of claim 1, wherein said antigenic product comprises a viral display vehicle displaying on its surface said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP.
- 36 (New). The immunizing composition of claim 35, wherein said viral display vehicle is a filamentous bacteriophage.

- 37 (New). The immunizing composition of claim 35, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises residues 1 to 8 of SEQ ID NO:1.
- 38 (New). The immunizing composition of claim 35, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP consists of residues 1 to 8 of SEQ ID NO:1.
- 39 (New). The immunizing composition of claim 35, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP comprises SEQ ID NO:5.
- 40 (New). The immunizing composition of claim 35, wherein one of said at least one A $\beta$ PP epitope spanning the  $\beta$ -secretase cleavage site of A $\beta$ PP consists of SEQ ID NO:5.
- 41 (New). A method for inducing an immune response against the  $\beta\text{-secretase}$  cleavage site of A\$\beta\text{PP}\$ comprising administering the immunizing composition of claim 24 to a human subject in need thereof to induce an immune response against the \$\beta\text{-secretase}\$ cleavage site of A\$\beta\text{PP}\$ and block \$\beta\text{-}\$ secretase cleavage of A\$\beta\text{PP}\$, thereby inhibiting the formation of amyloid \$\beta\text{.}}